

July 30, 2003

HAND DELIVERED

Mr. Thomas M. Dorman Executive Director Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

Re: PSC Case No. 2003-00051

Dear Mr. Dorman:

Please find enclosed for filing with the Commission an original and ten copies of the responses of East Kentucky Power Cooperative, Inc. ("EKPC") to the Supplemental Information Requests in this case of the Commission Staff, the Attorney General, and the Kentucky Division of Energy, dated July 9, 2003.

Very truly yours,

Charles A. Lile

Senior Corporate Counsel

**Enclosures** 

Cc: Parties of Record

### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2003-00051

### IRP INFORMATION REQUEST RESPONSE

### NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DIVISION OF ENERGY'S SECOND REQUEST FOR INFORMATION DATED 7/7/03

In response to the following Natural Resources and Environmental Protection Cabinet Division of Energy's second request for information, East Kentucky Power Cooperative, Inc. ("EKPC") submits responses to the questions contained therein. Each response with its associated supportive reference materials is individually tabbed. Larger reference documents are submitted separately and labeled as an enclosure to a specific question.

Ron Brown Gary Davidson Jim Lamb Jeff Hohman Bob Hughes Randy Dials Frank Oliva Shiela Medina

#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2003 INTEGRATED RESOURCE PLAN OF	)	
EAST KENTUCKY POWER COOPERATIVE	)	CASE NO. 2003-00051

## NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DIVISION OF ENERGY'S SECOND REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE

Comes the Natural Resources and Environmental Protection Cabinet, Division of Energy, Intervenor herein, and makes the following Requests for Information to East Kentucky Power Cooperative (EKPC):

13. Follow-up to KDOE Question No. 1d. The response states that EKPC "believes that most, if not all, of the current marketing efforts are very beneficial to the end consumer... We remain firmly committed to the well being of our membership by providing programs that serve the collective good of all."

The Electric Water Heater Retrofit Program provides an incentive to customers who install a high-efficiency electric water heater instead of a gas one. The benefit/cost ratios reported for this program in Appendix II show a Participant Cost ratio of 0.77, a TRC ratio of 0.49, a Utility Cost ratio for the distribution utility of 0.06, a Utility Cost ratio for the power supply utility of 0.00, and a Societal Cost ratio of 0.44. A Participant Cost ratio of less than one means that customers who participate in the program are made economically worse off, a TRC ratio of less than one means that the program causes the average cost of energy services across all customers to increase, a Utility Cost ratio for the distribution utility of less than one means

that the program causes the revenue requirements of the distribution utility to increase, a Utility Cost ratio for the power supply utility of less than one means that the program causes the revenue requirements of the power supply utility to increase, and a Societal Cost ratio of less than one means that the program causes society as a whole to be worse off.

- a. How do these reported results square with the intent to serve the end consumer and the collective good of all?
- b. In view of these negative benefit/cost results, why is there no discussion in the IRP about the possibility of reevaluating or terminating this program?
- 14. Follow-up to KDOE Question No. 10. Approximately what percentage of the homes currently being sold in EKPC's service area would meet the standards of a Touchstone Energy Home?
  - 15. Follow-up to KDOE Question No. 11c.
  - a. Please refer to Page 29 of the IRP, Table 3-6. In view of the fact that the sum of energy sales to large commercial customers and Gallatin Steel comprised over twenty-six percent (26%) of the total retail sales in 2001, why was the size of the market for industrial efficiency judged to be "small?"
  - b. In addition to the four criteria listed in the table, why wasn't the size of the potential energy impacts included as a criterion?
- 16. Follow-up to Attorney General Question No. 17. The response provides estimated capital costs and O&M costs for material handling equipment to cofire fescue with coal at five percent (5%) and ten percent (10%) of the Btu boiler input at the new Gilbert plant.
  - a. What are the corresponding cost estimates for cofiring sawdust at smaller percentages of the boiler Btu input, for example two percent (2%) and five percent (5%)?

b. What additional equipment, if any, is needed to cofire sawdust at low percentages, for example, at two percent (2%)?

Respectfully submitted,

IRIS SKIDMORE

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COUNSEL FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET, DIVISION OF ENERGY

### CERTIFICATE OF SERVICE

I hereby certify that on the day of July, 2003 a true and accurate copy of the foregoing pleading was mailed, postage pre-paid, to the following:

Mr. David G. Eames Vice President East Kentucky Power Cooperative 4775 Lexington Road P.O. Box 707 Winchester, Kentucky 40392-0707

Hon. Dale Henley
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Hon. Charles A. Lile Senior Corporate Counsel East Kentucky Power Cooperative 4775 Lexington Road P.O. Box 707 Winchester, Kentucky 40392-0707

Hon. Elizabeth E. Blackford Assistant Attorney General Office for Rate Intervention 1024 Capital Center Drive, Suite 200 Frankfort, Kentucky 40601-8204

Iris Skidmore

KDOE STAFF'S REQUEST DATED 7/7/03

**REQUEST 13** 

**RESPONSIBLE PARTY:** 

**Gary Crawford** 

**REQUEST 13.** Follow-up to KDOE Question No. 1d. The response states that EKPC "believes that most, if not all, of the current marketing efforts are very beneficial to the end consumer...We remain firmly committed to the well being of our membership by providing programs that serve the collective good of all."

The Electric Water Heater Retrofit Program provides an incentive to customers who install a high-efficiency electric water heater instead of a gas one. The benefit/cost ratios reported for this program in Appendix II show a Participant Cost ratio of 0.77, a TRC ratio of 0.49, a Utility Cost ratio for the distribution utility of 0.06, a Utility Cost ratio for the power supply utility of 0.00, and a Societal Cost ratio of 0.44. A Participant Cost ratio of less than one means that customers who participate in the program are made economically worse off, a TRC ratio of less than one mans that the program causes the average cost of energy services across all customers to increase, a Utility Cost ratio for the distribution utility of less than one means that the program causes the revenue requirements of the distribution utility to increase, a Utility Cost ratio for the power supply utility of less than one means that the program causes the revenue requirements of the power supply utility to increase, and a Societal Cost ratio of less than one means that the program causes society as a whole to be worse off.

**REQUEST 13a.** How do these reported results square with the intent to serve the end consumer and the collective good of all?

RESPONSE 13a. The Electric Water Heater Retrofit Program was analyzed with DSMANAGER, and computer program printouts are reported in Appendix II of East Kentucky Power's IRP. Results are also summarized on page 84 of the IRP report. Note that the TRC ratio reported on page 84 is different than the TRC ratio reported in Appendix II. This is because of an assumption embedded in the DSMANAGER computer program.

This particular marketing program is a fuel-switching concept. The computer program code computes its TRC by using the price of wholesale natural gas. EKPC views the TRC as a benefit/cost test relating to it, its member distribution systems, and their retail customers. As such, EKPC recomputed the TRC ratio to utilize the price of retail natural gas. (EKPC refers to the computation as an adjusted TRC). It is the adjusted TRC that is reported on page 84. From the point of view of EKPC, its members, and their customers, this marketing program is a wash between benefits and costs.

Appendix II reports the Distribution system RIM test as 1.37, which helps make this marketing program attractive to some EKPC member systems. Since the distribution system RIM is over 1.0 and the adjusted TRC is at 1.0, EKPC views this program positively.

**REQUEST 13b.** In view of these negative benefit/cost results, why is there no discussion in the IRP about the possibility of reevaluating or terminating this program?

**RESPONSE 13b.** Please note that the Electric Water Heater Retrofit program reflects positive benefit cost ratios for two of DSMANAGER's tests, the TRC and the Distribution RIM.

Generally speaking, EKPC reevaluates all its marketing programs on an as-needed basis, usually when important assumptions change. EKPC uses a variety of indicators to

determine whether programs should be terminated – benefit cost ratios are an important indicator, but not the only one.

KDOE STAFF'S REQUEST DATED 7/7/03 REQUEST 14

**RESPONSIBLE PARTY:** 

James C. Lamb

**REQUEST 14.** Follow-up to KDOE Question No. 10. Approximately what percentage of the homes currently being sold in EKPC's service area would meet the standards of a Touchstone Energy Home?

**RESPONSE 14.** EKPC does not know the approximate percentage of manufactured homes being sold in EKPC member systems' service areas that would meet the standards of a Touchstone Energy Home, because of the detailed standards required to qualify.

The Touchstone Energy Manufactured Home program has strict standards, including additional floor, wall, and ceiling insulation, as well as double pane windows and an electric heat pump. We believe that currently very few would meet the standard.

**KDOE STAFF'S REQUEST DATED 7/7/03** 

**REQUEST 15** 

RESPONSIBLE PARTY: James C. Lamb

**REQUEST 15.** Follow-up to KDOE Question No. 11c.

**REQUEST 15a.** Please refer to Page 29 of the IRP, Table 3-6. In view of the fact that the sum of energy sales to large commercial customers and Gallatin Steel comprised over twenty-six percent (26%) of the total retail sales in 2001, why was the size of the market for industrial efficiency judged to be small?"

**RESPONSE 15a.** Refer to 15b.

**REQUEST 15b.** In addition to the four criteria listed in the table, why wasn't the size of the potential energy impacts included as a criterion?

#### RESPONSE 15b.

The 26% can be broken into two components:

Large Commercial and Industrial: 18%

Gallatin Steel: 8%

EKPC's response to Question 11c was not meant to include Gallatin Steel. Owen Electric's price to Gallatin Steel is based on an interruptible rate. Owen has worked very hard with this large customer in the area of demand response. In fact, Gallatin Steel represents a significant block of DSM on the EKPC system.

The remaining 18% is made up of a combination of large commercial accounts and major industrial accounts. As the original table shows, EKPC screened several program concepts that pertain to this market. Two program concepts were implemented for this group of customers (C&I Demand Response and Commercial Lighting). Two other concepts are also implemented by EKPC member systems, but normally on a case by case basis. They are Commercial HVAC and Industrial Efficiency.

There are a relatively few customers in this category, and a large degree of uniqueness when it comes to their use of electricity. Furthermore, they are served by 16 separate companies. In every case, the customer represents a large load for the distribution cooperative providing service. EKPC member systems already provide these customers with great attention when it comes to energy efficiency and overall customer service. EKPC provides assistance to member systems, usually through its EnVision subsidiary.

EKPC believes that it would be difficult to come up with a one size fits all for this group of customers. EKPC believes that the current method of case-by-case service is appropriate for this segment.

KDOE STAFF'S REQUEST DATED 7/7/03
REQUEST 16

RESPONSIBLE PARTY: James Shipp

**REQUEST 16.** Follow-up to Attorney General Question 17. The response provides estimated capital costs and O&M costs for material handling equipment to cofire fescue with coal at five percent (5%) and ten percent (10%) of the Btu boiler input at the new Gilbert plant.

**REQUEST 16a.** What are the corresponding cost estimates for cofiring sawdust at smaller percentages of the boiler Btu input, for example two percent (2%) and five percent (5%)

**RESPONSE 16a.** The estimated capital cost to install sawdust handling equipment to capable of firing enough sawdust to produce 3.4 MW is approximately \$2,110,000. This does not include the cost to provide equipment to deliver the sawdust to the boiler.

**REQUEST 16b.** What additional equipment, if any, is needed to cofire sawdust at low percentages, for example, at two percent (2%)?

**RESPONSE 16b.** The additional equipment needed to co-fire sawdust is the delivery system that would take the sawdust from the unloading equipment and deliver it to the boiler. The cost of this additional equipment is estimated to be \$500,000.